

GenCore version 5.1.6	Sequence 71, Appl			
Copyright (c) 1993 - 2003 Compugen Ltd.	Sequence 37, Appl			
TM nucleic - nucleic search, using sw model	Sequence 45, Appl			
Run on: June 27, 2003, 02:18:18 ; Search time 60 Seconds (without alignments)	Sequence 67, Appl			
Scoring table: IDENTITY_NUC Gapop 10.0 , Gapext 1.0	Sequence 61, Appl			
Searches: 441362 seqs, 153338381 residues	Sequence 49, Appl			
Total number of hits satisfying chosen parameters:	882724			
Minimum DB seq length: 0	Sequence 41, Appl			
Maximum DB seq length: 2000000000	Sequence 49, Appl			
Post-processing: Minimum Match 0% Listing first 45 summaries	Sequence 55, Appl			
Database :	Sequence 57, Appl			
Patents NA:*	Sequence 17, Appl			
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*	Sequence 17, Appl			
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*	Sequence 17, Appl			
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*	Sequence 17, Appl			
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*	Sequence 17, Appl			
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*	Sequence 17, Appl			
6: /cgn2_6/ptodata/1/ina/backfile1.seq:*	Sequence 17, Appl			
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.	Sequence 23, Appl			
SUMMARIES				
% Result No.	Query Score	Match Length	DB ID	Description
1	450.4	41.5	996	2 US-08-924-759-21
2	450.4	41.5	996	3 US-09-248-335.21
3	444.8	41.0	948	2 US-08-924-759-11
4	444.8	41.0	948	3 US-09-248-335.11
5	368.4	34.0	1228	3 US-09-248-335.43
6	203.2	18.7	773	3 US-09-248-335.39
7	202.6	18.7	902	3 US-08-924-747.5
8	202.6	18.7	902	4 US-09-248-373B-5
9	202.6	18.7	902	4 US-09-248-715.5
10	197	18.2	935	3 US-08-924-747.19
11	197	18.2	935	4 US-09-248-715.19
12	197	18.2	935	4 US-09-248-715.19
13	196.2	18.1	971	3 US-09-248-335.65
14	195	18.0	911	3 US-08-924-759-9
15	195	18.0	911	3 US-09-248-335.9
16	194.8	18.0	1100	3 US-09-248-335.53
17	186.2	17.8	1068	3 US-09-248-335.73
18	186.2	17.2	967	3 US-09-248-335.51
19	183.8	16.9	895	2 US-08-924-759.23
20	183.8	16.9	895	3 US-09-248-335.23
21	182.8	16.8	904	3 US-09-248-335.69
22	178.8	16.5	970	3 US-09-248-335.47
23	177.8	16.4	946	4 US-08-924-747.11
24	177.8	16.4	946	4 US-09-247-373B-11
25	177.8	16.4	946	4 US-09-246-715.11
26	177.4	16.4	840	2 US-08-924-759-21
27	177.4	16.4	840	3 US-09-248-335.13

	Matches	561;	Conservative	0;	Mismatches	141;	Indels	6;	Gaps	2;	Best Local Similarity	79.2%;	Pred. No.	7.7e-84;	Matches	561;	Conservative	0;	Mismatches	141;	Indels	6;	Gaps	2;								
Qy	30	AAGGCCAACGGGCAATTGGGGCGGAGAAGGGGCTCTGGACTCTGGGTAG	89								Qy	30	AAGGCCAACGGGCAATTGGGGCGGAGAAGGGGCTCTGGACTCTGGGTAG	89		30	AAGGCCAACGGGCAATTGGGGCGGAGAAGGGGCTCTGGACTCTGGGTAG	89														
Db	87	AAGCTCGACATGGCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	146								Db	87	AAGCTCGACATGGCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	146		87	AAGCTCGACATGGCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	146														
Qy	90	CCGGTCCGGAGGGCGCATCGCCCTGGCGCTGGCGCTAGAGTAGC	149								Qy	90	CCGGTCCGGAGGGCGCATCGCCCTGGCGCTGGCGCTAGAGTAGC	149		90	CCGGTCCGGAGGGCGCATCGCCCTGGCGCTGGCGCTAGAGTAGC	149														
Db	147	CCCATTCGGCAGGGCTGGCGCTGGCGCTGGCGCTAGAGTAGCT	206								Db	147	CCCATTCGGCAGGGCTGGCGCTGGCGCTGGCGCTAGAGTAGCT	206		147	CCCATTCGGCAGGGCTGGCGCTGGCGCTGGCGCTAGAGTAGCT	206														
Qy	150	GGAGGAGACCTGATGGCGAGAGAGACCCGCTCCGGCAACCGTGATAA	209								Qy	150	GGAGGAGACCTGATGGCGAGAGAGACCCGCTCCGGCAACCGTGATAA	209		150	GGAGGAGACCTGATGGCGAGAGAGACCCGCTCCGGCAACCGTGATAA	209														
Db	207	GGAGCAGAACCTGGG--AACAGAGGAGGAGTGGCTCTCCGGCAACCCGGT	263								Db	207	GGAGCAGAACCTGGG--AACAGAGGAGGAGTGGCTCTCCGGCAACCCGGT	263		207	GGAGCAGAACCTGGG--AACAGAGGAGGAGTGGCTCTCCGGCAACCCGGT	263														
Qy	210	GAAGATCCGGTGTCTCCACGACGGGGTCAACGAGTCCTCATCCCTCA	269								Qy	210	GAAGATCCGGTGTCTCCACGACGGGGTCAACGAGTCCTCATCCCTCA	269		210	GAAGATCCGGTGTCTCCACGACGGGGTCAACGAGTCCTCATCCCTCA	269														
Db	264	GAAGATCCGGTGTCTCCACGACGGGGTCAACGAGTCCTCATCCCTCA	323								Db	264	GAAGATCCGGTGTCTCCACGACGGGGTCAACGAGTCCTCATCCCTCA	323		264	GAAGATCCGGTGTCTCCACGACGGGGTCAACGAGTCCTCATCCCTCA	323														
Qy	270	GTACCTGGAGGGAGGCTTCTCCGATCGCCCTCGAACCCCTAGC	326								Qy	270	GTACCTGGAGGGAGGCTTCTCCGATCGCCCTCGAACCCCTAGC	326		270	GTACCTGGAGGGAGGCTTCTCCGATCGCCCTCGAACCCCTAGC	326														
Db	324	GTACCTCGAGGAGGGTCTGGGAGGAGGAGGAGGAGGAGGAGG	383								Db	324	GTACCTCGAGGAGGGTCTGGGAGGAGGAGGAGGAGGAGGAGG	383		324	GTACCTCGAGGAGGGTCTGGGAGGAGGAGGAGGAGGAGGAGG	383														
Qy	327	GCGCCGAGGGCCCTTCTGGCGCTTGCGTGGCGCCGGCTGGCTC	386								Qy	327	GCGCCGAGGGCCCTTCTGGCGTGGCGCCGGCTGGCTC	386		327	GCGCCGAGGGCCCTTCTGGCGTGGCGCCGGCTGGCTC	386														
Db	384	GCGCCGAGGGCCCTTCTGGCGCTTGCGTGGCGCCGGAC	443								Db	384	GCGCCGAGGGCCCTTCTGGCGCTTGCGTGGCGCCGGAC	443		384	GCGCCGAGGGCCCTTCTGGCGCTTGCGTGGCGCCGGAC	443														
Qy	387	CCGCCTCTCGAGAACGCTCAAGGGCAAGCTGAAAGCTGAA	446								Qy	387	CCGCCTCTCGAGAACGCTCAAGGGCAAGCTGAAAGCTGAA	446		387	CCGCCTCTCGAGAACGCTCAAGGGCAAGCTGAAAGCTGAA	446														
Db	444	CCGCCTGTGGAAAGCTCAAGGGCAAGGGCAAGGGCAAGTGG	503								Db	444	CCGCCTGTGGAAAGCTCAAGGGCAAGGGCAAGGGCAAGTGG	503		444	CCGCCTGTGGAAAGCTCAAGGGCAAGGGCAAGGGCAAGTGG	503														
Qy	447	CCTCAAGAACCTCTCGAGGGCGCTGGGACAAGCCCTCTGG	506								Qy	447	CCTCAAGAACCTCTCGAGGGCGCTGGGACAAGCCCTCTGG	506		447	CCTCAAGAACCTCTCGAGGGCGCTGGGACAAGCCCTCTGG	506														
Db	504	CCCTCGCACTCTGGGAGGGCGCTGGGACAAGCCCTCTGG	563								Db	504	CCCTCGCACTCTGGGAGGGCGCTGGGACAAGCCCTCTGG	563		504	CCCTCGCACTCTGGGAGGGCGCTGGGACAAGCCCTCTGG	563														
Qy	507	GTTGCTGAGGGCCCTTCTGGCGCTTGCGTGGCGCCGGCTGG	566								Qy	507	GTTGCTGAGGGCCCTTCTGGCGCTTGCGTGGCGCCGGCTGG	566		507	GTTGCTGAGGGCCCTTCTGGCGCTTGCGTGGCGCCGGCTGG	566														
Db	564	CTTCTGCTGAGCTGGCTCTGGCTCTGGCTCTGGCTCTGG	623								Db	564	CTTCTGCTGAGCTGGCTCTGGCTCTGGCTCTGGCTCTGG	623		564	CTTCTGCTGAGCTGGCTCTGGCTCTGGCTCTGGCTCTGG	623														
Qy	567	CGAGTCAGCTGGCGAGGTGGCGCTGGCGCTGGCGCAAG	626								Qy	567	CGAGTCAGCTGGCGAGGTGGCGCTGGCGCAAGGGCTGG	626		567	CGAGTCAGCTGGCGAGGTGGCGCTGGCGCAAGGGCTGG	626														
Db	624	CGGGCTAGGGTGGAGAGAGAGAGAGAGAGAGAGAGAG	683								Db	624	CGGGCTAGGGTGGAGAGAGAGAGAGAGAGAGAGAGAG	683		624	CGGGCTAGGGTGGAGAGAGAGAGAGAGAGAGAGAGAG	683														
Qy	627	GGGGAGAGGGCTGCGCAAGCCCTCTGGCGCTGGCGCT	686								Qy	627	GGGGAGAGGGCTGCGCAAGCCCTCTGGCGCTGGCGCT	686		627	GGGGAGAGGGCTGCGCAAGCCCTCTGGCGCTGGCGCT	686														
Db	634	GCGCCCAAGGGCTGGCAAGACCTCTGGCGCAAGGGCTGG	743								Db	634	GCGCCCAAGGGCTGGCAAGACCTCTGGCGCAAGGGCTGG	743		634	GCGCCCAAGGGCTGGCAAGACCTCTGGCGCAAGGGCTGG	743														
Qy	687	GCTCAAGAGAAAGTACGGCATCGAGTAGGGCGGACGG	734								Qy	687	GCTCAAGAGAAAGTACGGCATCGAGTAGGGCGGACGG	734		687	GCTCAAGAGAAAGTACGGCATCGAGTAGGGCGGACGG	734														
Db	744	GATGAGAACGGCTGGCATCGAGTAGGACCATCCATGG	791								Db	744	GATGAGAACGGCTGGCATCGAGTAGGACCATCCATGG	791		744	GATGAGAACGGCTGGCATCGAGTAGGACCATCCATGG	791														

RESULT 2

US-09-248-3135-21
i Sequence 21, Application US/09248335
i Patent No. 6096504
i GENERAL INFORMATION:
i APPLICANT: MCGRONIGLE, BRIAN
i TITLE OF INVENTION: PLANT GLUTATHIONE-S-TRANSFERASE
i FILE REFERENCE: CL-1128-A
i CURRENT APPLICATION NUMBER: US/09/248,335
i EARLIER APPLICATION NUMBER: 08/924,759
i NUMBER OF SEQ ID NOS: 74
i SOFTWARE: Microsoft Word Version 7.0A
i SEQ ID NO: 21
i LENGTH: 996
i TYPE: DNA
i ORGANISM: maize
i US-09-248-3135-21

RESULT 3

US-08-924-759-11
i Sequence 11, Application US/08924759
i Patent No. 596229
i GENERAL INFORMATION:
i APPLICANT: O'KEEFE, DANIEL
i TITLE OF INVENTION: PLANT GLUTATHIONE-S-TRANSFERASE
i NUMBER OF SEQUENCES: 24
i CORRESPONDENCE ADDRESS:
i ADDRESSEE: E.I. DU PONT DE NEMOURS AND COMPANY
i STREET: 1007 MARKET STREET
i CITY: WILMINGTON
i STATE: DELAWARE
i COUNTRY: UNITED STATES OF AMERICA
i ZIP: 19888
i COMPUTER READABLE FORMATE:
i MEDIUM TYPE: DISKETTE, 3.50 INCH
i COMPUTER: IBM PC COMPATIBLE
i OPERATING SYSTEM: MICROSOFT WORD FOR WINDOWS 95

Query Match 41.5% ; Score 450.4 ; DB 3 ; Length 996 ;

SOFTWARE: MICROSOFT WORD VERSION 7.0A

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/924,759

FILING DATE:

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: FLOYD, LINDA AXAMETHY

REGISTRATION NUMBER: 33,692

REFERENCE/DOCKET NUMBER: CL-1128

TELECOMMUNICATION INFORMATION:

TELEPHONE: 302-892-8112

TELEFAX: 302-773-0164

SEQUENCE CHARACTERISTICS:

SEQUENCE FOR SEQ ID NO: 11:

LENGTH: 948 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: Linear

MOLECULE TYPE: cDNA

HYPOTHETICAL: NO

ANTI-SENSE: NO

ORGANISM SOURCE:

TISSUE TYPE: maize

IMMEDIATE SOURCE:

CLONE: ceb5.pk0051.f8

US-08-924-759-11

Query Match 41.0%; Score 444.8; DB 2; Length 948;

Best Local Similarity 81.0%; Pred. No. 1..1e-82; Matches 557; Conservative 0; Mismatches 122; Indels 9; Gaps 3;

Query 43 GCAATGGCGGGAGAAAGCGGAGTCGCTGGACTCTGGGTGAGCCGTTGGGAG 102
Db 21 GCGGGGAGAGAAGGGCGCTGGCTGGACTCTGGGTGAGCCGTTGGGAG 80Query 103 CGCTGGCGATCGGCTGGAGAAAGCCCTGCCAGAAGTAGCTGGGTGAGCCGTTGGGAG 162
Db 81 CGCTGGCGATCGGCTGGAGAAAGCCATCCCTAGAGTACTCGAGGAGCTG 140Query 163 ATGCCGG -- -CAAGAGCAACCGGCGCTCCCGCCAAACCGGGTGCATAAGAGATCCG 219
Db 141 CTGGGGGGCCAGAGGCCACATCTCTCGTCCAAACCCGGTCCAGAGATCCC 200Query 220 GTGCTCCCTACGAGGGCGTGGCTCAAGAGTCCCTCGAGTACCTGGAG 279
Db 201 GTGCTCCCTACGAGGGCGTGGCTCAAGAGTCCCTCGAGTACCTGGAG 260Query 280 GAGGCTTCGGGA -- -CGCGCCGCTCTGGCTCCCTCGACCCCTAGGCGCGCGAG 336
Db 261 GAGGCTTCGGCGCTCCGGCCAGGCTCTCCCGAGCCGCTAACCGGGCGAG 320Query 337 GCGCGCTTCGGCGACTACGTCGAGAAGGCTCAAGAGTCCCTCGCTCTGG 396
Db 321 GCGCGCTTCGGCGCTACTCGAC -- -AAGGCTCAAGCCGGCGCGCTCTGG 377Query 397 AAGCTCAAGGGCGAGCCCGAGGGCGAGGAGTCGTCGAGATCCCTCAAGAC 456
Db 378 AAGCTCAAGGGCGAGCCCGAGGGCGAGGAGTCGTCGAGATCCCTCAAGAC 437Query 457 CTGCAAGGGCGCTGGCTCAAGCCCTTCTCGGGAGAACAGTTCGGGTGTCGAC 516
Db 438 CTGCAAGGGCGCTGGCTCAAGCCCTTCTCGGGAGAACAGTTCGGGTGTCGAC 497Query 517 GCGCGCTTCGGCCCTAACGGCTGTTAACGGCTAACGGGAGTTCAAGC 576
Db 498 GTGGGCTTCGGCTTCGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCTGG 557Query 577 CTGGGGAGAGTCGAGCCCAAGATCCCGTGGCCAAGAGTCGGAGGGAGAC 636
Db 558 GTGGGAGATCGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCTGG 617Query 637 GTGCGCAAAGGCGCTACTCGCCGACAAAGTGTACGACTTCATGGCTGAAGAG 696
QyDb 618 GTGGCAGGACCCCTAACCGGGAAAGGGAGTCATCAACCTGTCAGAG 677
Qy 697 AAGTACGGCATGAGTAGGGCGGCCGAC 724
Db 678 ACCTACGCCATCGAGTAGTAGAGCGGCAC 705

RESULT 4

US-09-248-335-11

; Sequence 11, Application US/09248335

; Patent No. 6096504

; GENERAL INFORMATION:

; APPLICANT: MCCONIGLE, BRIAN

; TITLE OF INVENTION: PLANT GLUTATHIONE-S-TRANSFERASE ENZYMES

; FILE REFERENCE: CL-1128-A

; CURRENT APPLICATION NUMBER: US/09/248,335

; CURRENT FILING DATE: 1999-02-10

; EARLIER APPLICATION NUMBER: 08/924,759

; EARLIER FILING DATE: 1997-September-05

; NUMBER OF SEQ ID NOS: 74

; SOFTWARE: Microsoft Word Version 7.0A

; SEQ ID NO 11

; LENGTH: 948

; TYPE: DNA

; ORGANISM: maize

; US-09-248-335-11

Query Match 41.0%; Score 444.8; DB 3; Length 948;

Best Local Similarity 81.0%; Pred. No. 1..1e-82; Matches 557; Conservative 0; Mismatches 122; Indels 9; Gaps 3;

Query 43 GCAATGGCGGGAGAAAGCGGAGTCGCTGGACTCTGGGTGAGCCGTTGGGAG 102
Db 21 GCGGGGAGAGAAGGGCGCTGGCTGGACTCTGGGTGAGCCGTTGGGAG 80Query 103 CGCTGGCGATCGGCTGGAGAAAGCCCTGCCAGAAGTAGCTGGGTGAGCCGTTGGGAG 162
Db 81 CGCTGGCGATCGGCTGGAGAAAGCCATCCCTAGAGTACTCGAGGAGCTG 140Query 163 ATGCCGG -- -CAAGAGCAACCGGCGCTCCCGCCAAACCGGGTGCATAAGAGATCCG 219
Db 141 CTGGGGGGCCAGAGGCCACATCTCTCGTCCAAACCCGGTCCAGAGATCCC 200Query 220 GTGCTCCCTACGAGGGCGTGGCTCAAGAGTCCCTCGAGTACCTGGAG 279
QyQuery 220 GTGCTCCCTACGAGGGCGTGGCTCAAGAGTCCCTCGAGTACCTGGAG 279
Db 201 GTGCTCCCTACGAGGGCGTGGCTCAAGAGTCCCTCGAGTACCTGGAG 260Query 280 GAGGCTTCGGGA -- -CGCGCCGCTCTGGCTCCCTCGACCCCTAGGCGCGCGAG 336
Db 261 GAGGCTTCGGCGCTCCGGCCAGGCTCTCCCGAGCCGCTAACCGGGCGAG 320Query 337 GCGCGCTTCGGCGACTACGTCGAGAAGGCTCAAGAGTCCCTCGCTCTGG 396
Db 321 GCGCGCTTCGGCGCTACTCGAC -- -AAGGCTCAAGCCGGCGCGCTCTGG 377Query 397 AAGCTCAAGGGCGAGCCCGAGGGCGAGGAGTCGTCGAGATCCCTCAAGAC 456
QyQuery 397 AAGCTCAAGGGCGAGCCCGAGGGCGAGGAGTCGTCGAGATCCCTCAAGAC 456
Db 378 AAGCTCAAGGGCGAGCCCGAGGGCGAGGAGTCGTCGAGATCCCTCAAGAC 437Query 457 CTGCAAGGGCGCTGGCTCAAGCCCTTCTCGGGAGAACAGTTCGGGTGTCGAC 516
Db 438 CTGCAAGGGCGCTGGCTCAAGCCCTTCTCGGGAGAACAGTTCGGGTGTCGAC 497Query 517 GCGCGCTTCGGCCCTAACGGCTGTTAACGGCTAACGGGAGTTCAAGC 576
Db 498 GTGGGCTTCGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCTGG 557Query 577 CTGGGGAGAGTCGAGCCCAAGATCCCGTGGCCAAGAGTCGGAGGGAGAC 636
Db 558 GTGGGAGATCGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCTGG 617Query 637 GTGCGCAAAGGCGCTACTCGCCGACAAAGTGTACGACTTCATGGCTGAAGAG 696
Qy

Db 192 TGTGAAATCCCATATGCTGTCAGTACATTGAGGGTTTGGAAATGACAGAAATCCCTTG 251 ; ORIGINAL SOURCE: SOYBEAN
 Qy 307 CTCCCCCTCCGACCCCTTACGGCGCCGACGGCCGACTACGTCGACAG 366 ; TISSUE TYPE: SOYBEAN
 Db 252 TTGCCCTTCAACCCCTAACAGAGCTCAGACTAGATTCGGGTGATGATAAG 311 ; IMMEDIATE SOURCE:
 ; CLONE: GSTA
 ; US-09-296-715-5
 Query Match 18.7%; Score 202.6; DB 4; Length 902;
 Best Local Similarity 58.1%; Pred. No. 4e-33;
 Matches 377; Conservative 0; Mismatches 269; Indels 3; Gaps 1;
 Db 15 GGTGTTAATAGATGTTCTGCGCAAGTCATTTGGATGAGTCAGATGCACTTGGTCAA 74
 Qy 67 GTGCTGCTGGACTCTGGTTGACCCGTTGGGACCCGGATGGCTGGCGAG 126
 Db 127 AAGGCCCTGGCCCTAACGAGTACGGGAGAGGACCTGATGGCCCAAGGGACCGCTC 186
 Qy 75 AACGGTAAATAGTACAAAGAAGGACTTGAGAA---CAAGAGTCCTCTCTCTC 131
 Db 432 TTGAGGAGAGAACATCTAGTTTGTGATAATGGCTTCTACACTGGTTC 491
 Qy 187 CTGGCCGAAACCGGTTGCTAACAGATGGCTGGCCCTGGCTCTGGCCTGC 246
 Db 132 CTCCAATGAAACCCGGTTCACAGAAATGGCAAACCCATT 191
 Qy 247 AACAGTCCTCATCATCCTCCAGTACCTGGAGGAGCTTCCGGAGCGCCCTG 306
 Db 192 TGTGAAATCCCTCATGGTGTGATGACATTGAGGAGTTGGATAGAAATCCCTTG 251
 Qy 307 CTCCCTCGACCCCTAACGGGAGGGCCGCTCTACTGGCCGACAG 666
 Db 252 TTGCTCTGACCTTACAGAGAGCTAGATGTTGATGAGTGTGATGATAG 311
 Qy 367 AAGCTCTAGACTGGCTAACGGGATCGGATGAGTAGG 715
 Db 312 AAGATATATGATCTGGAAAGGAGATTGGACATCAAAGGAGAAAAGAGCTGCC 371
 Qy 427 CGCCCGAGATGCTGACATCCCTAACAGCCCTGGGACAGCCCTTC 486
 Db 372 AAGAGGAGTTCTAGAACCCCTTAATGTGTTGAGGAACAGTGGGAGACAGACTTAT 431
 Qy 487 TTCCGGGGGACAGTTGGCTGGCTGGCTGCGCCTTCACCGGTTGGCTTC 546
 Db 432 TTGAGGAGGAGACATTTGTTGGATATAGGCTGTTCAACTTGTGTTGGCTTC 491
 Qy 547 CACAGCTAGAGGATGGCTGGGGAGAGCTGGCTCCAAAGGGCTCTACTGGCCGAG 606
 Db 492 AAACGCTATGATGTTCTGCTCTCTGAAAGGGTGCCTGCTCATGAAAG 611
 Qy 607 TGGCCAAAGCCTGGGGAGAGCTGGCTCCAAAGGGCTCTACTGGCCGAG 666
 Db 612 GTTATGAGTCAATTGATGCTAGAAAGAAGTTGGGATTGACTAGG 660
 ; RESULT 9
 ; US-09-296-715-5
 ; Sequence 5, Application US/09296715
 ; Patent No. 6171839
 ; GENERAL INFORMATION:
 ; APPLICANT: MCGONIGLE, BRIAN
 ; O'KEEFE, DANIEL
 ; TITLE OF INVENTION: SOYBEAN GLUTATHIONE-S-TRANSFERASE
 ; NUMBER OF SEQUENCES: 32
 ; NUMBER OF ENZYMES: 32
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: E.I. DU PONT DE NEMOURS AND COMPANY
 ; STREET: 1007 MARKET STREET
 ; CITY: WILMINGTON
 ; STATE: DELAWARE
 ; COUNTRY: UNITED STATES OF AMERICA
 ; ZIP: 19898
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: DISKETTE, 3.50 INCH
 ; COMPUTER: IBM PC COMPATIBLE
 ; OPERATING SYSTEM: MICROSOFT WORD FOR WINDOWS 95
 ; SOFTWARE: MICROSOFT WORD VERSION 7.0A
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/296,715
 ; FILING DATE:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: FLOYD, LINDA AXAMETHY
 ; REFERENCE NUMBER: 33,692
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 302-732-8112
 ; TELEFAX: 302-732-0164
 ; INFORMATION FOR SEQ ID NO: 5:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 902 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: cDNA
 ; HYPOTHETICAL: NO
 ; ANTI-SENSE: NO
 ; RESULT 10
 ; US-08-924-747-19
 ; Sequence 19, Application US/08924747
 ; Patent No. 6063570
 ; GENERAL INFORMATION:
 ; APPLICANT: MCGONIGLE, BRIAN
 ; APPLICANT: O'KEEFE, DANIEL
 ; TITLE OF INVENTION: ENZYMES
 ; NUMBER OF SEQUENCES: 3
 ; NUMBER OF ENZYMES: 3
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: E.I. DU PONT DE NEMOURS AND COMPANY
 ; STREET: 1007 MARKET STREET
 ; CITY: WILMINGTON
 ; STATE: DELAWARE
 ; COUNTRY: UNITED STATES OF AMERICA
 ; ZIP: 19898
 ; COMPUTER READABLE FORM:

QY	659	CGGACAAAGGTGACTGAGCACTTCAATGGGCTGCTCAAGGAGAACTGAGGCTATCGAGTAGG	715
Db	657	AGGACAAAGGTGACTGAGCACTTCAATGGGCTGCTCAAGGAGAACTGAGGCTATCGAGTAGG	713
RESULT 11			
	US-09-247-373B-19		
	Sequence 19, Application US/09247373B		
	Patent No. 6168954		
	GENERAL INFORMATION		
	APPLICANT: MC CONIGLE, BRIAN		
	APPLICANT: O'KEEFE, DANIEL		
	TITLE OF INVENTION: SOYBEAN GLUTATHIONE-S-TRANSFERASE ENZYMES		
	FILE REFERENCE: CL-1108-A		
	CURRENT APPLICATION NUMBER: US/09/247,373B		
	PRIOR APPLICATION NUMBER: 1999-02-10		
	PRIOR FILING DATE: 1997-09-05		
	NUMBER OF SEQ ID NOS: 56		
	SOFTWARE: Microsoft Office 97		
	SEQ ID NO 19		
	LENGTH: 935		
	TYPE: DNA		
	ORGANISM: SOYBEAN		
	US-09-247-373B-19		
QY	59	AGGGCTGTGCTGACTCTGGTGAACGGCTGCGCTGGAGCCGGCTGGCATGGCG 118	
Db	61	ATGAGGTTGTTCTCTGGATTCTGGCAAGTCATTTGGATGGGTCTGGATTCAC 120	
QY	119	TGGCGGAAAGGGCTGCCCTACGATACGGGGAGGAGCTGTGGCGGCAAGAGCG 178	
Db	121	TTCGTGAAAGGTATCCAAATATGATCAAGAAGGAGCTGTGAGG---AACAAAGAGTC 177	
QY	179	ACGGCTCTCGCGCCAAACCGGGTGTATAGAAAGATCCCGTGTCTCCACGGGCC 238	
Db	178	CTCGTCTTCAAAATGAAACCGGTTCACAAAGATTCCGTTCTCATCCAAAGGGCA 237	
QY	239	GTCGGTAAACGAGTCCCTCATCTCCAACTTGTGGAGGGCTTCCGGAGCGC 298	
Db	238	AACCAATTCCGAAATCCCTCATGCTTCTAGTACATTGAGGGTTGGATGAGAA 297	
QY	299	CCGGCTCTCGCTCCCTGGACCCCTTAATCGGGCGGCAAGGGCGGACTACG 358	
Db	298	ATCCCTGTTGCTTCAAGACCCCTAACAGAGCTTGTGGTATGATTCGGCTGATTG 357	
QY	359	TGCAACAAAGGTCTACACTCGGTCTCCGGCTCTGGAGCTCAGGGCAAGCGG 418	
Db	358	TTCGACATTAAAGATACATCA-TCTTGGAAAGAAATTGGACATCAAAGGGAAAG 416	
QY	419	CGGAGGGCGCGAGATGCTGAATCCCTAAGGAGCTGGGACAAAGTGGGACA 478	
Db	417	AAGCTGCCAAAGGGAGTTCATAGGCCCTTAATGTGGAGAACAGTGGGAGATA 476	
QY	479	AGGCCCTCTTCGCGGACAGTTGGGTTGTCGACGCCCTTGCGGCCCTTGACCG 538	
Db	477	AGACTTATTGGAGAACATATTGGTGTGGATATAGCACTGTTCTCATTCACA 536	
QY	539	CGGGTTTCAACGCTACAGAGGTACGGGCTGGCTGGGGTGGCGCCAAAGGGCT 598	
Db	537	CTTGGTTCAAAAGCTTATGAGTTTGGCTTGGAGCTGATGAGTGGTCCCTGGT 596	
QY	599	TCGGCCGGTGGCCAAAGGCTGGCGAGGGAGAGCTGCGCAAGAGCTCTACTCGC 658	
Db	597	TTCGGTTGGCCAAAGGTGGCTTACAGAAAGAGACTGTTGCAAAAGTCTCCGTGATC 656	
QY	659	CGGACAAAGTGGACATTGACGTTCAATGGCTGTCAGAGAGAACTGGCATCGAGG 715	

Db 657 AGCAAGGTCTATGAGTTGAGATAAGAAAGTTAGCAGTAGG 715
RESULT 12
US-09-296-715-19
Sequence 15, Application US/09296715
Patent No. 6171839
GENERAL INFORMATION:
APPLICANT: MCNICHOLE, BRIAN
APPLICANT: O'KEEFE, DANIEL
TITLE OF INVENTION: SOYBEAN GLUTATHIONE-S-TRANSFERASE
TITLE OF INVENTION: ENZYMES
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: B.I. DU PONT DE NEMOURS AND COMPANY
STREET: 1007 MARKET STREET
CITY: WILMINGTON
STATE: DELAWARE
COUNTRY: UNITED STATES OF AMERICA
ZIP: 19898
COMPUTER READABLE FORM:
MEDIUM TYPE: DISKETTE, 3.50 INCH
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: MICROSOFT WORD FOR WINDOWS 95
SOFTWARE: MICROSOFT WORD VERSION 7.0A
CURRENT APPLICATION DATA:

Search completed: June 27, 2003, 03:14:47
Job time : 62 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 27, 2003, 03:12:20 ; Search time 1016 Seconds
(without alignments)
1585.262 Million cell updates/sec

Title: US-09-508-710-1
Perfect score: 1085
Sequence: 1 caaacaaaggacagatcg.....taaaaaaaaaaaaaaaa 1085

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1055720 seqs, 742224136 residues

Total number of hits satisfying chosen parameters: 2111440

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

```
Published Applications NA:*
1: /cn2_6_ptodata/1/pubna/us07_pubcomb.seq:*
2: /cn2_6_ptodata/1/pubna/pct_new_pub.seq:*
3: /cn2_6_ptodata/1/pubna/us05_new_pub.seq:*
4: /cn2_6_ptodata/1/pubna/us06_pubcomb.seq:*
5: /cn2_6_ptodata/1/pubna/us07_new_pub.seq:*
6: /cn2_6_ptodata/1/pubna/pct5_pubcomb.seq:*
7: /cn2_6_ptodata/1/pubna/us08_new_pub.seq:*
8: /cn2_6_ptodata/1/pubna/us09_pubcomb.seq:*
9: /cn2_6_ptodata/1/pubna/us09_new_pub.seq:*
10: /cn2_6_ptodata/1/pubna/us09_pubcomb.seq:*
11: /cn2_6_ptodata/1/pubna/us10_new_pub.seq:*
12: /cn2_6_ptodata/1/pubna/us10_pubcomb.seq:*
13: /cn2_6_ptodata/1/pubna/us09_new_pub.seq:*
14: /cn2_6_ptodata/1/pubna/us09_pubcomb.seq:*
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
c 1	191.8	17.7	945	10 US-09-770-445-348	Sequence 348, App
c 2	170.6	15.7	737	10 US-09-770-149-77	Sequence 77, App
c 3	165.8	15.3	794	10 US-09-770-445-836	Sequence 836, App
c 4	155.6	14.3	866	10 US-09-770-445-73	Sequence 573, App
c 5	131.8	12.1	273	10 US-09-923-876-1124	Sequence 1124, App
c 6	120.6	11.1	385	10 US-09-785-574-752	Sequence 752, App
c 7	114.6	10.6	267	10 US-09-923-876-1137	Sequence 1137, App
c 8	114.4	10.5	249	10 US-09-050-010-8	Sequence 8, App
c 9	111.4	10.3	257	10 US-09-923-876-1928	Sequence 1928, App
c 10	10.2	278	10 US-09-923-876-599	Sequence 259, App	
c 11	110.4	10.2	260	10 US-09-923-876-2087	Sequence 2087, App
c 12	108.6	10.0	267	10 US-09-923-876-1232	Sequence 1232, App
c 13	106.4	9.8	261	10 US-09-923-876-2873	Sequence 2873, App
c 14	105.4	9.7	351	10 US-09-878-574-2942	Sequence 2942, App
c 15	103.2	9.5	268	10 US-09-923-876-4142	Sequence 3412, App
c 16	99.2	9.1	256	10 US-09-923-876-1617	Sequence 1617, App
c 17	99	9.1	345	10 US-09-770-791-782	Sequence 782, App
c 18	98	9.0	247	10 US-09-923-876-1035	Sequence 3035, App
c 19	96.2	8.9	234	10 US-09-923-876-2550	Sequence 2550, App

ALIGNMENTS

RESULT 1
US-09-770-445-348/c
Sequence 348, Application US/09770445
Patent No. US2002002281A1
GENERAL INFORMATION:
APPLICANT: Gorlach, Jorn
INVENTOR: An, Yong-Qiang
Hamilton, Carol M.
Price, Jennifer L.
Raines, Tracy M.
APPLICANT: Yu, Yang
Rameka, Joshua G.
APPLICANT: Page, Amy
APPLICANT: Matthew, Abraham V.
APPLICANT: Ledford, Brooke L.
APPLICANT: Woessner, Jeffrey P.
APPLICANT: Haas, William David
Garcia, Carlos A.
APPLICANT: Kricker, Maja
APPLICANT: Slader, Ted
APPLICANT: Davis, Keith R.
APPLICANT: Hoffman, Neil
APPLICANT: Hurban, Patrick
APPLICANT: Allen, Keith
APPLICANT: Hoffmann, Neil
TITLE OF INVENTION: Expressed Sequences of Arabidopsis
TITLE OF INVENTION: thaliana
FILE REFERENCE: 2033US (PARA-012PRV)
CURRENT APPLICATION NUMBER: US/09/770,445
CURRENT FILING DATE: 2001-01-26
PRIOR APPLICATION NUMBER: US 60/178,472
PRIOR FILING DATE: 2000-01-27
NUMBER OF SEQ ID NOS: 999
SEQ ID NO: 348
LENGTH: 945
TYPE: DNA
ORGANISM: Arabidopsis thaliana
US-09-770-445-348

Query Match 17.7%; Score 191.8; DB 10; Length 945;
Best Local Similarity 56.8%; Pred. No. 4.3e-44;
Matches 374; Conservative 0; Mismatches 282; Indels 3; Gaps 1;

QY CURRENT APPLICATION NUMBER: US/09/770,149
 CURRENT FILING DATE: 2001-01-26
 PRIOR APPLICATION NUMBER: 60/1178,506
 PRIOR FILING DATE: 2000-01-27
 SEQ ID NOS: 999
 SOFTWARE: FastSEQ for Windows Version 4.0
 SEQ ID NO: 77
 LENGTH: 737
 TYPE: DNA
 ORGANISM: *Arabidopsis thaliana*
 FEATURE:
 NAME/KEY: misc feature
 LOCATION: (1) ..(737)
 OTHER INFORMATION: n = A,T,C or G
 US-09-770-149-77

Query Match 15.7%; Score 170.6; DB 10; Length 737;
 Best Local Similarity 55.5%; Prc. No. 3..7e-38;
 Matches 336; Conservative 0; Mismatches 266; Indels 3; Gaps 1;

QY 64 CTGGTGCTGTGACTCTGGTGCTGGCGAGGCCGTTGGGTGGATTCGGGTGCGC 123
 Db 4 CGGATTCCTTGGATTACTGGCAAGTGTGGATTCGGGTGCGTGGATTCGGTGGGA 63

QY 124 GAGAAGGGCTGCCCTACAGATGCGGACCTAGCGTACAGGAGCTAATGGCGGAGACCGCTATGGCGGAGACCGC 183
 Db 64 GAGNNNGTGTAGTGTGATAAGAGAGAATTCGGGATTCAGAGAGAATTCCTCG --AAAGAGCCCTTCG 120

Db 184 CTCTCTCCGGCCACCCGGCTCATATCTCGTACATCCGATCCAGACGGCCGTC 243
 Db 121 CTCTCTCAAGAATTCCTTCAAGAAATCCGGTTCTGTGTTCAACGGTAAACCG 180

QY 244 GTCAACAGAGCTCCCTCATATCTCGTACATCCGATCCGCTCCGGCTCCGGCCCT 303
 Db 181 GTATGTGAATCTCTTAAGGTTGTCCTAGCTGACAGGGTTGGCCGGAGAAACCG 240

QY 304 CTGCTCCCTCCGACCCCCCTACGGCGGCCGCGAGCCCTCTGGCCGACTAGCTGCC 363
 Db 241 TTCTTCCCTTNGANNNNTACGGAGNNNNACGGCTCATTCGGGTGATTCGGAC 300

QY 364 AAGAGGGCTACGACTGGGCTCCGGCTCTGGAAAGCTCAAGGGGAGCCGGCGAG 423
 Db 301 AAGAGGTACCGACGCCAATTCAAGCTATGGCAAGAAAGTGAACAGAACCA 360

QY 424 GCGGCGGGAGATGCTGGACACTCTCGGGTGGGCTTCACGGGCTGGGAAAGCC 483
 Db 361 GCGAAGAAGAAATTATTAGGGAGTGAATCTGAGTGAATCTGAGTGAATAACCT 420

QY 484 TTCTTCGGGGGCAAGGGCTGGGCTGGACACTCTCGGGTGGGCTTCACGGGCTGG 543
 Db 421 TACTTGGGGAGATAGTTGGTAGTGAATTTCTGATTACATTCGAGTGG 480

GENERAL INFORMATION:
 Patent No. US2002005963A1
 APPLICANT: Gorlach, Jorn
 APPLICANT: An, Yong-Qiang
 APPLICANT: Hamilton, Carol M.
 APPLICANT: Price, Jennifer L.
 APPLICANT: Raines, Tracy M.
 APPLICANT: Yu, Yang
 APPLICANT: Rameaka, Joshua G.
 APPLICANT: Page, Amy
 APPLICANT: Matthew, Abraham V.
 APPLICANT: Ledford, Brooke L.
 APPLICANT: Woessner, Jeffrey P.
 APPLICANT: Haas, William David
 APPLICANT: Krieger, Carlos A.
 APPLICANT: Slader, Ted
 APPLICANT: Davis, Keith R.
 APPLICANT: Allen, Keith
 APPLICANT: Hoffman, Neil
 APPLICANT: Hurban, Patrick
 TITLE OF INVENTION: Expressed Sequences of *Arabidopsis thaliana*
 TITLE OF INVENTION: *thaliana*
 FILE REFERENCE: 2024 (PASA-013PRV)

RESULT 2
 US-09-770-149-77
 Sequence 77, Application US/09/770149
 Patent No. US2002005963A1
 GENERAL INFORMATION:
 APPLICANT: Gorlach, Jorn
 APPLICANT: An, Yong-Qiang
 APPLICANT: Hamilton, Carol M.
 APPLICANT: Price, Jennifer L.
 APPLICANT: Raines, Tracy M.
 APPLICANT: Yu, Yang
 APPLICANT: Rameaka, Joshua G.
 APPLICANT: Page, Amy
 APPLICANT: Matthew, Abraham V.
 APPLICANT: Ledford, Brooke L.
 APPLICANT: Woessner, Jeffrey P.
 APPLICANT: Haas, William David
 APPLICANT: Krieger, Carlos A.
 APPLICANT: Slader, Ted
 APPLICANT: Davis, Keith R.
 APPLICANT: Allen, Keith
 APPLICANT: Hoffman, Neil
 APPLICANT: Hurban, Patrick
 TITLE OF INVENTION: Expressed Sequences of *Arabidopsis thaliana*
 TITLE OF INVENTION: *thaliana*
 FILE REFERENCE: 2024 (PASA-013PRV)

RESULT 3
 US-09-770-445-836/c
 Sequence 836, Application US/09/770445
 Patent No. US20020023281A1
 GENERAL INFORMATION:
 APPLICANT: Gorlach, Jorn
 APPLICANT: An, Yong-Qiang
 APPLICANT: Hamilton, Carol M.
 APPLICANT: Price, Jennifer L.
 APPLICANT: Raines, Tracy M.
 APPLICANT: Yu, Yang
 APPLICANT: Rameaka, Joshua G.
 APPLICANT: Page, Amy
 APPLICANT: Matthew, Abraham V.
 APPLICANT: Ledford, Brooke L.
 APPLICANT: Woessner, Jeffrey P.
 APPLICANT: Haas, William David
 APPLICANT: Krieger, Carlos A.
 APPLICANT: Slader, Ted
 APPLICANT: Davis, Keith R.
 APPLICANT: Allen, Keith
 APPLICANT: Hoffman, Neil
 APPLICANT: Hurban, Patrick
 TITLE OF INVENTION: Expressed Sequences of *Arabidopsis thaliana*
 TITLE OF INVENTION: *thaliana*
 FILE REFERENCE: 2024 (PASA-013PRV)

Query Match Score 15.3%; Score 165.8%; DB 10; Length 794;
 Best Local Similarity 53.8%; Pred. No. 8 7e-37; Mismatches 298; Indels 3; Gaps 1;
 Matches 351; Conservative 0; Minmatches 351; Minindels 0; Minindels 0;

Qy 59 AGGGCTCGTGGCTGGACTCTGGCTGGAGCCGCTGGGGAGCGCATGGCG 118
 Db 791 AGAGGGTATTCTCTGATTTGGGGAGAGGAGATGGCTT 732

Qy 119 TGGCCGAGANGGCCCTGCCCTACGAGTACGCCAGGGAGCTGATGGCCGAG 178
 Db 731 TGAAGAGAAATAATGTCGAATTCGATTAACGAAACAGATGTGGAA---CAAAGCC 675

Qy 179 ACCGCTCCTCGGCCAACCGGTGATAAAGAGATCCGGTGTCTCCAGGCC 238
 Db 674 CGATTCTCCTCGAGATGATCATCGATACTGAGATGATGTGGAA 615

Qy 239 GTCGGTCAACGAGTCCCTCATCATCCCTCAGATTCAGTACAGGAGGTGCGC 298
 Db 614 NTCCGGTATGATCATCGATACTGAGATGATCATCGATACTGACAAAGTTGGCTAGAAAA 555

Qy 299 CGCTCGTCCCTCGGACCCCTACGGCGGCCCTTGCGGCCGATAG 358
 Db 554 CCCACTCTCTCTCTGATTCCTACCAAAAGCTCAGGCCAAATTGGGAGATTCA 495

Qy 359 TCGACAAAGAGGCTACACGGCTCCGGCTCTGGAAAGCTCAAGGGGGCGGAGG 418
 Db 494 TCGATTAAGAGGCTATGCTTACGGGTTGAGGTTGGGAGCTAAGGGCGAGGRTG 435

Qy 419 CGAGGGGGGCCGCGGAGATGCTGGCTGGGGAGCTAAGGGCGAGG 478
 Db 434 AGGGGGAAAGAGGAGTCACTGAGATACATGAGCTGAGTGGAGACA 375

Qy 479 AGCGCTTCTCGGCCACAGTTCGGCTTCTGGGCCCTTGCGGCCGTTACCG 538
 Db 374 AGACTTACTTGGTGAACATTCCGTTATGTTGATACTCTCATGGATTACA 315

Qy 539 CGTGGTTCCACAGCTTACAGAGTACGGGATGGCTGGCCAGA 598

Db 314 GTGGGTITGAAGCGTATGGAGAGTTGGAGTTCAAGATGAGCTGTC 255
 Qy 599 TGGCCCGTGGGCCAGCGCTGGGGAGGGCTGGCCAGAGGCCCTACTCGC 658
 Db 254 TGATNNCTGGGTTAAAGGGTGTGGAGAGACTGGCTTAAGTCTTCCTGATT 195
 Qy 659 CGGACAGGGTGTACGACTCATGGCTCTGGCTCAAGAGAAGTAGGGCATCGA 710
 Db 194 CGGAGAGATCATTAGTGTGGATTAACCTGGGATCGA 143

RESULT 4
 US-09-770-445-573/C
 Sequence 573, Application US/09770445
 Patent No. US2002023281A1
 GENERAL INFORMATION:
 APPLICANT: Gorlach, Jorn
 APPLICANT: An, Yong-Qiang
 APPLICANT: Hamilton, Carol M.
 APPLICANT: Price, Jennifer L.
 APPLICANT: Raines, Tracy M.
 APPLICANT: Yu, Yang
 APPLICANT: Rameka, Joshua G.
 APPLICANT: Page, Amy
 APPLICANT: Matthew, Abraham V.
 APPLICANT: Ledford, Brooke L.
 APPLICANT: Woessner, Jeffrey P.
 APPLICANT: Haas, William David
 APPLICANT: Garcia, Carlos A.
 APPLICANT: Krieger, Maja
 APPLICANT: Slader, Ted
 APPLICANT: Davis, Keith R.
 APPLICANT: Allen, Keith R.
 APPLICANT: Hoffman, Neil
 APPLICANT: Hurban, Patrick
 TITLE OF INVENTION: Expressed Sequences of Arabidopsis
 FILE REFERENCE: 2023US (PATA-012PRV)
 CURRENT APPLICATION NUMBER: US/09/770,445
 CURRENT FILING DATE: 2001-01-26
 PRIOR APPLICATION NUMBER: US 60/178,472
 PRIOR FILING DATE: 2000-01-27
 NUMBER OF SEQ ID NOS: 999
 SOFTWARE: FastSEQ for Windows Version 4.0
 SEQ ID NO: 836
 LENGTH: 794
 TYPE: DNA
 ORGANISM: Arabidopsis thaliana
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (1)..(794)
 OTHER INFORMATION: n = A, T, C or G
 US-09-770-445-836

Query Match Score 14.3%; Score 155.6%; DB 10; Length 866;
 Best Local Similarity 53.5%; Pred. No. 6 8e-34; Mismatches 299; Indels 3; Gaps 1;
 Matches 348; Conservative 0; Minmatches 348; Minindels 0; Minindels 0;

Qy 65 TGGTCCTGCTGGACTCTGGATGGCGCTGGCGCATCGCGCTGGCG 124
 Db 850 TGATTCCTCTGATTTACTGGCAAGATGTTGGATGAGAGATGCTTGGCTG 791
 Qy 125 AGAAGGGCTGCGCTACGAGCTGCGGAGGACTGATGGCGCAAGGCGAC 184
 Db 790 AGAAAGGATCAAGATGATGATACAGAAACAGATCCATGGT---TAAAGCTCTTAC 734
 Qy 185 TCCTCCGGCAACCGGGTACATGAGATGGCTCTCCACGAGGCGCTGGCG 244
 Db 733 TCATAGAGTAACTGGATTCACGAAATGAACTCCGGTTCTCACTCCAA 674
 Qy 245 TCAACGGATGCCCTCATCATCCAGTACCTGGAGGAGGCTTCCGGAGGCGCGCTC 304
 Db 673 TTGTTGAAATCTCTTATTCACTGAGTACATGGTAACTGGTGGCTGATCCCAA 614
 Qy 305 TGCTCCCTCGGACCCCTACCGGGCTGCGCTGCGCTGGCGCTGGCG 364
 Db 613 TCCCTCCCTGATCCCTACAGAGTCTGAGTATGGCTGAACTCATGACAA 554

Qy 365 AGAAGGCTTACAACTGGGGTCCGCTCTGGAAAGCTCAAGGGCGGCCAGG 424
 Db 553 AAAGATTTACACCCTATCGAAAGTATGGCAAACTGGCGAGAACATGAGCAG 494

Qy 425 CGCGCGCGAGATGCTGACATCCTCGACATCTAGAAAGTATGGCAAACTGGCGAGAACATGAGCAG 484
 Db 493 TTAAGGAGAAATTGTTGACATTAGACATTTAGACAGTGGAAACACCTT 434

Qy 485 TCTTCGCGGGACAAGTTGGGTCTGAGCCCTCGAGGCCCTTCAGCGCTGGT 544
 Db 433 ATTACCGTGTGAAAGTATTGATACTAGAATTTGGATACTACAGCTGGT 374

Qy 545 TCAACAGCTACAGAGGATACCGGAGTTCAGCTGGGGAGGGGGAGATGCCG 604
 Db 373 TCAAGGCATGGAGAAATTGTTGAAATTCAGTATGAAACAGAGTTCTCATATGACTA 314

Qy 605 CGTGGGCAAGGGCTGGGGAGGGAGAGGGCTCTACTCGCCGGACA 664
 Db 313 CGTGGACCAAGGGCTGGGGAGGGAGAGGGCTCTACTCGCCGGACA 254

Qy 665 AGGTGTAGCACTTCATCGCCCTCAAGAAAGTAAGCCATCGAGTAG 714
 Db 253 GCAATTTGAGTAGTTATGCTGAGAAATTGGACAGCGTAG 204

RESULT 5
 US-09-923-876-1124
 Sequence 1124; Application US/09923876
 Patent No. US200103958A1
 GENERAL INFORMATION:
 APPLICANT: Lalngudi, Raghunath V.
 APPLICANT: Kamigaki, Laura Y. (tto)
 APPLICANT: Sherman, Bradley K.
 TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN SEEDLING
 FILE REFERENCE: PL-0012-1 CON
 CURRENT FILING DATE: 2001-08-06
 PRIOR APPLICATION NUMBER: 09/298-329
 PRIOR FILING DATE: 1999-04-21
 PRIOR APPLICATION NUMBER: 60/085, 331
 PRIOR FILING DATE: 1998-05-05
 NUMBER OF SEQ ID NOS: 6332
 SOFTWARE: PERL Program
 SEQ ID NO: 1124
 LENGTH: 273
 TYPE: DNA
 ORGANISM: Zea mays
 FEATURE:
 NAME/KEY: misc_feature
 OTHER INFORMATION: Incyte ID No. US20020013958A1 700158152H1
 NAME/KEY: unuse
 LOCATION: 171
 OTHER INFORMATION: a, t, c, g, or other

Qy US-09-923-876-1124
 Sequence 1124; Application US/09923876
 Patent No. US200103958A1
 GENERAL INFORMATION:
 APPLICANT: Lalngudi, Raghunath V.
 APPLICANT: Kamigaki, Laura Y. (tto)
 APPLICANT: Sherman, Bradley K.
 TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN SEEDLING
 FILE REFERENCE: PL-0012-1 CON
 CURRENT FILING DATE: 2001-08-06
 PRIOR APPLICATION NUMBER: 09/298-329
 PRIOR FILING DATE: 1999-04-21
 PRIOR APPLICATION NUMBER: 60/085, 331
 PRIOR FILING DATE: 1998-05-05
 NUMBER OF SEQ ID NOS: 6332

Db 211 TCCTCACGGGGCGCCATAACGATCCAGTATCTGAGTACATCGAGGG 270
 Db 211 TCCTCACGGGGCGCCATAACGATCCAGTATCTGAGTACATCGAGGG 270

RESULT 6
 US-09-878-574-752
 Sequence 752; Application US/09878574
 Patent No. US20010348A1
 GENERAL INFORMATION:
 APPLICANT: Byrum, Joseph R.
 APPLICANT: La Rosa, Thomas J.
 APPLICANT: Thompson, Michael D.
 TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with
 TITLE OF INVENTION: Plants
 FILE REFERENCE: 38-21(15401) B
 CURRENT APPLICATION NUMBER: US/09/878, 574
 CURRENT FILING DATE: 2001-12-21
 PRIOR APPLICATION NUMBER: 09/335, 535
 PRIOR FILING DATE: 1999-06-14
 NUMBER OF SEQ ID NOS: 15775
 SEQ ID NO: 752
 LENGTH: 385
 TYPE: DNA
 ORGANISM: Glycine max
 OTHER INFORMATION: Clone ID: LIB3028-046-Q1-B1-H10
 US-09-878-574-752

Query Match 11.1%; Score 120.6; DB 10; Length 385;
 Best Local Similarity 63.3%; Pred. No. 3.6e-24;
 Matches 202; Conservative 0; Mismatches 114; Indels 3; Gaps 1;

Qy 59 AGGGCTGCGCTGACTGCGCTGGACTCTGGCTGGCCCTGGCGATGCCG 118
 Db 50 ATGAGCTGGTGTCTGCTGATGATTCTGCGCAAGTCCATTGGATGGGTGAGATTGAC 109

Qy 119 TGGCGAAAGGGCTGGCTCTAGAGTAAGGGAGGAGCTGATGGCGAAGAGCG 178
 Db 110 TTGCTGAAAGGGTATCAATATGAGTAAAGAGAGTGGTGGG--AAGGAGATCTG 166

Qy 179 ACCGGCTCTCGCGGCAACCGGTGCTAAAGAATCCACGGACCTCCACGGAGGCC 238
 Db 167 CTCTTCCTCCAAATGAAACGGGTCAAGAAGATTCGGTTCATCCACATGGCA 226

Qy 239 GTGCCCTCAAGGAGCCCTCATCATCCTCGAGTACCTGGAGGAGCTCCGGAGGCC 298
 Db 227 AACCCATTGTAATCCCTATTCGCTGATGATGAGGACCTTGGAAATGAGAAA 286

Qy 299 CGCGCTGTCTCCCTGACCCCTAGGCCGCGCCGCTCTGGCCGCTAGCG 358
 Db 287 ATCCCTGTTGCTCTGACCCCTAACAGAGCTGAGTCTGAGTCTGAGTTG 346

Qy 359 TCGACAGAAGGTCTAGA 377
 Db 347 TTGTATGAAAGATATGA 365

RESULT 7
 US-09-923-876-1137
 Sequence 1137; Application US/09923876
 Patent No. US200103958A1
 GENERAL INFORMATION:
 APPLICANT: Lalngudi, Raghunath V.
 APPLICANT: Kamigaki, Laura Y. (tto)
 APPLICANT: Sherman, Bradley K.
 TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN SEEDLING
 FILE REFERENCE: PL-0012-1 CON
 CURRENT FILING DATE: 2001-08-06
 PRIOR APPLICATION NUMBER: 09/298-329
 PRIOR FILING DATE: 1999-04-21
 PRIOR APPLICATION NUMBER: 60/085, 331
 PRIOR FILING DATE: 1998-05-05
 NUMBER OF SEQ ID NOS: 6332

Qy 44 CAATGGCGGACGAGAAAGGGCTGGCTGGTGGACTCTGGCTGGAGCCGTCGGTGC 103
 Db 34 CAATGGCGGACGAGAAAGGGCTGGCTGGTGGACTCTGGCTGGAGCCGTCGGTGC 93

Qy 104 GCGTGGCGCATCGCGCTGGCGAGAACGCTGAAGGTGGCTGGCTGGTGC 163
 Db 94 GCGTGGCGCATCGCGCTAACCTGAAGGCCCTGGTGGAGCTCA 153

Qy 164 TGGCGGGGAGAGGGGACCCCTCTCCGGCAACCCGGCTGATAAGAGTCCGGTGC 223
 Db 154 --GCAAGAAGGGCGCTCTGGGTCAACCCGGTCAAGAGGCTGGTGC 210

Qy 224 TCCCTCCAGAGGGCGCTGGCTGACAGGCTGGCTGGAGGG 283

RESULT 10
US-09-923-876-2599

Sequence 2599, Application US/09923876
Patent No. US20020013958A1

GENERAL INFORMATION:
APPLICANT: Laligudi, Raghunath V.
APPLICANT: Kamigaki, Laura Y. (tto)
APPLICANT: Sherman, Bradley K.

TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN SEEDLING

FILE REFERENCE: PL-0012-1 CON

CURRENT APPLICATION NUMBER: US/09/923, 876
CURRENT FILING DATE: 2001-08-06
PRIORITY NUMBER: 09/298, 329
PRIORITY FILING DATE: 1998-05-05
NUMBER OF SEQ ID NOS: 6332
SEQ ID NO: 2087
LENGTH: 260

Query Match 10.2%; Score 110.4; DB 10; Length 260;
Best Local Similarity 70.7%; Pred. No. 2.3e-21;
Matches 176; Conservative 0; Mismatches 67; Indels 6; Gaps 2;

Qy 87 GAGCCCGTTGGCAGGGCTGCGATCGCCCTGGCGAGAGGGCTGCCTAGAGTA 146
Db 3 GAGCCGTTCGTGATCGGCTCCTGATCGCTGAGTAAGGGCTGCAAGTTGAGTT 62

Qy 147 CGCGGGAGGAGACCTGATGGCGCAAGAGGACCCCTCTCCGGCAACCCGCTGCA 206
Db 63 CGTGGAGGG -- TCGTGGCAGGAGGGAGCTGAGTCGAGCTGACCCGCTGCA 119

Qy 207 TAAGAGATCCGGTGTCTCCAGGGGTGCTGCTGAGGTCTCTCATATCTCT 266
Db 120 CAGAGAGTCGGCTCCCTGCTGTCCAGGCTTCCGAGTCATCTGATCTGATCTG 179

Qy 267 CCAGTACCTGGAGGAGGC -- TTCGGAGGCGCCCTGCTGCTCCGACCCCTA 323
Db 180 CGATGATCAGGTTGAGGTTGTCCTCCGAGGCTTCGCGCTCCGCGCTCA 239

RESULT 12
US-09-923-876-2599

Sequence 2599, Application US/09923876
Patent No. US20020013958A1

GENERAL INFORMATION:
APPLICANT: Laligudi, Raghunath V.
APPLICANT: Kamigaki, Laura Y. (tto)
APPLICANT: Sherman, Bradley K.

TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN SEEDLING

CURRENT APPLICATION NUMBER: PL-0012-1 CON

CURRENT FILING DATE: 2001-08-06
PRIORITY NUMBER: 09/298, 329
PRIORITY FILING DATE: 1998-05-05
NUMBER OF SEQ ID NOS: 6332
SEQ ID NO: 1232
LENGTH: 267

Query Match 10.2%; Score 111.2; DB 10; Length 278;
Best Local Similarity 68.6%; Pred. No. 1.4e-21;
Matches 168; Conservative 0; Mismatches 74; Indels 3; Gaps 1;
OTHER INFORMATION: a, t, c, g, or other

Qy 126 GAGGGGCTGCCAACCCGGTGCATAAGAGATCCGGGTGCTCCAGGCGCT 245
Db 5 GAAAGGGGCTGCGACTACGAGTAACGGGAGGACCTGATGGCGCAAGGGACCCCT 185

Qy 186 CCTCGCGCCAACCCGGTGCATAAGAGATCCGGGTGCTCCAGGCGCT 245
Db 62 GTCGGCFCACAAACCGGTTGACAGAAGGGTGGCGTGTGCACTACGGGAGGGT 121

Qy 246 CAACGAGTCCTCATCATCTCGTCACTGGAGGAGCTCCGAGGCCCGCTCT 305
Db 122 CGGGGATTCACCCATCATCTGTCAGTACATCGAGGCTGAGGCTGAGGCT 181

Qy 306 GCTGCCCTCGAACCCCTACGGGGCGCAGGCCACTAGTCGACAA 365
Db 182 CAGCGGGGAGCCCTAGAGCCGCCAGGGTTGCGGAAGA 241

Qy 366 GAAGG 370
Db 242 CAATG 246

RESULT 11
US-09-923-876-2087

Sequence 2087, Application US/09923876
Patent No. US20020013958A1

GENERAL INFORMATION:
APPLICANT: Laligudi, Raghunath V.
APPLICANT: Kamigaki, Laura Y. (tto)

TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN SEEDLING

CURRENT APPLICATION NUMBER: US/09/923, 876
CURRENT FILING DATE: 2001-08-06
PRIORITY NUMBER: 09/298, 329
PRIORITY FILING DATE: 1998-05-05
NUMBER OF SEQ ID NOS: 6332
SEQ ID NO: 1232
LENGTH: 267

Query Match 10.2%; Score 110.4; DB 10; Length 260;
Best Local Similarity 70.7%; Pred. No. 2.3e-21;
Matches 176; Conservative 0; Mismatches 67; Indels 6; Gaps 2;

Qy 87 GAGCCCGTTGGCAGGGCTGCGATCGCCCTGGCGAGAGGGCTGCCTAGAGTA 146
Db 3 GAGCCGTTCGTGATCGGCTCCTGATCGCTGAGTAAGGGCTGCAAGTTGAGTT 62

Qy 147 CGCGGGAGGAGACCTGATGGCGCAAGAGGACCCCTCTCCGGCAACCCGCTGCA 206
Db 63 CGTGGAGGG -- TCGTGGCAGGAGGGAGCTGAGTCGAGCTGACCCGCTGCA 119

Qy 207 TAAGAGATCCGGTGTCTCCAGGGGTGCTGCTGAGGTCTCTCATATCTCT 266
Db 120 CAGAGAGTCGGCTCCCTGCTGTCCAGGCTTCCGAGTCATCTGATCTGATCTG 179

Qy 267 CCAGTACCTGGAGGAGGC -- TTCGGAGGCGCCCTGCTGCTCCGACCCCTA 323
Db 180 CGATGATCAGGTTGAGGTTGTCCTCCGAGGTTGTCCTCCGCGCTCCGCGCTCA 239

RESULT 12
US-09-923-876-2087

Sequence 2087, Application US/09923876
Patent No. US20020013958A1

GENERAL INFORMATION:
APPLICANT: Laligudi, Raghunath V.
APPLICANT: Kamigaki, Laura Y. (tto)

TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN SEEDLING

CURRENT APPLICATION NUMBER: PL-0012-1 CON

CURRENT FILING DATE: 2001-08-06
PRIORITY NUMBER: 09/298, 329
PRIORITY FILING DATE: 1998-05-05
NUMBER OF SEQ ID NOS: 6332
SEQ ID NO: 1232
LENGTH: 267

Query Match 10.2%; Score 111.2; DB 10; Length 278;
Best Local Similarity 68.6%; Pred. No. 1.4e-21;
Matches 168; Conservative 0; Mismatches 74; Indels 3; Gaps 1;
OTHER INFORMATION: a, t, c, g, or other

Qy 126 GAGGGGCTGCCAACCCGGTGCATAAGAGATCCGGGTGCTCCAGGCGCT 245
Db 5 GAAAGGGGCTGCGACTACGAGTAACGGGAGGACCTGATGGCGCAAGGGACCCCT 185

Qy 186 CCTCGCGCCAACCCGGTGCATAAGAGATCCGGGTGCTCCAGGCGCT 245
Db 62 GTCGGCFCACAAACCGGTTGACAGAAGGGTGGCGTGTGCACTACGGGAGGGT 121

Qy 246 CAACGAGTCCTCATCATCTCGTCACTGGAGGAGCTCCGAGGCCCGCTCT 305
Db 122 CGGGGATTCACCCATCATCTGTCAGTACATCGAGGCTGAGGCTGAGGCT 181

Qy 306 GCTGCCCTCGAACCCCTACGGGGCGCAGGCCACTAGTCGACAA 365
Db 182 CAGCGGGGAGCCCTAGAGCCGCCAGGGTTGCGGAAGA 241

Qy 366 GAAGG 370
Db 242 CAATG 246

PRIOR FILING DATE: 1999-04-21
 PRIOR APPLICATION NUMBER: 60/085, 331
 PRIOR FILING DATE: 1998-05-05
 NUMBER OF SEQ ID NOS: 6332-
 SOFTWARE: PERL, Program
 SEQ ID NO: 3412
 LENGTH: 268
 TYPE: DNA
 ORGANISM: Zea mays
 FEATURE:
 NAME/KEY: misc_feature
 OTHER INFORMATION: Inocyte ID No. US20020013958A1 70016217H1
 NAME/KEY: unsure
 LOCATION: 17, 35, 65-87, 89, 162-163, 211, 230, 242, 263
 OTHER INFORMATION: a, t, c, g, or other
 -S-09-923-876-3412

Query Match 9.5%; Score 103.2; DB 10; Length 268;
 Best Local Similarity 66.2%; Pred. No. 2.5e-19;
 Matches 139; Conservative 0; Mismatches 68; Indels 3; Gaps 1;

Query	Subject
33 GCAACCGGGAGAAATGGGGGGAGAAGGGGCTGGCTGCTGACTCTGGTGA	92
59 CGAGGTAAATTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	118
93 GTTGGCCAGCCGTGGCATCGCGCTGGCCAGAGGGCTGGCTAGCTGGCGA	152
119 CCTGGCAGCGCTGGGATAGCGCTGGGATAGGGCTTNNACGATCGCGA	178
153 GGAGGACCTGATGGCGCAAGACGACCCGCTCTGGCCAAACCCGGTCAAGAA	212
179 GCAGGACCTCTG--GACAATGGGAGCTCTCCNCAGACCCCATCCANAGAA	235
213 GATCCCGCTGTCTCCAGCGCCGGTC	242
236 GATCCCGCTGTCTCCAGCGCCGGTC	265

Search completed: June 27, 2003, 14:32:21